Hot Topics

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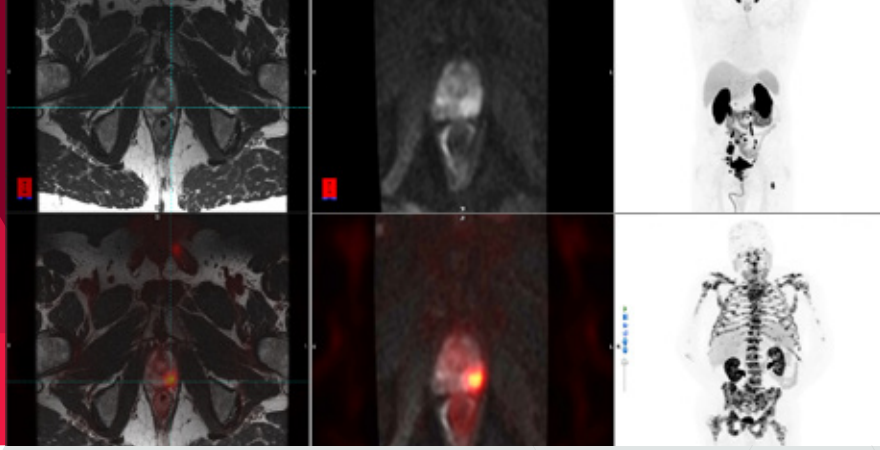

PSMA PET scan

Exciting news for advanced prostate cancer care

Patients with prostate cancer (either high risk or metastatic) have a new option—PSMA PET—that yields greater imaging accuracy, more precise treatment and longer survival rates, especially for men with castration-resistant disease. UW Health is one of a small number of regional treatment centers offering this advanced imaging and treatment option. The UW Carbone Cancer Center, part of UW Health, is Wisconsin's only comprehensive cancer center (and one of 52 in the U.S.) as designated by the National Cancer Institute.

Images above: Prostate Specific Membrane Antigen (PSMA)-based PET/MRI prostate cancer imaging combines the strengths of PET molecular imaging with the fine anatomic definition of MRI to provide improved detection of primary prostate cancer, tumor recurrence and advanced metastatic disease requiring 177Lu-PSMA-617 therapy.

What is PSMA and how long has it been available?

PSMA, or prostate specific membrane antigen, is a protein that sits primarily on the surface of the prostate cancer cell. Research conducted over the past 20 years shows that PSMA is overexpressed in more than 80 percent of men with prostate cancer. This makes PSMA a desirable diagnostic imaging target. In late 2020, the U.S. Food and Drug Administration (FDA) approved PSMA as a diagnostic marker through use of PET imaging. In early 2022, the FDA approved a complementary PSMA radioactive treatment option known as Pluvicto™.

Which prostate cancer patients may benefit from PSMA PET imaging?

- Men with high-risk prostate cancer who have not received treatment
- Men who received conventional treatment and later experienced a recurrence of their cancer
- Men with advanced metastatic prostate cancer, including those whose androgen-receptor (AR) pathway inhibition and taxane-based chemotherapy treatments have failed

Which prostate cancer patients may benefit from PSMA PET when used as a therapeutic?

To qualify for PSMA PET for therapeutic purposes, men must have advanced prostate cancer and have experienced failed treatments with androgen-receptor (AR) pathway inhibition and taxane-based chemotherapy.

continued

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Why is PSMA a superior alternative to conventional imaging and treatment options?

As a diagnostic: PSMA PET imaging, when performed in concert with MRI or CT for greater context, yields significantly more diagnostic accuracy than a conventional bone scan performed with CT imaging. This is especially beneficial for men initially diagnosed with high-risk prostate cancer because their treatment can be targeted more precisely and spare normal tissue.

As a therapeutic: For decades, survival-enhancing treatment options for men with castration-resistant prostate cancer have proved elusive. Fortunately, a Phase 3 clinical trial known as the VISION study, published in 2021 in the *New England Journal of Medicine,* concluded that patients who were given standard treatment plus Pluvicto™ or 177Lu-PSMA-617 (Lu 177 vipivotide tetraxetan) experienced a nearly 40 percent reduction in death compared with patients who were offered standard treatment without Pluvicto™.

How does Pluvicto™ work?

Pluvicto™ uses a high-affinity targeting ligand to direct potent radiotherapy to prostate cancer cells. The specific targeting of this therapy comes from the ligand portion of the therapeutic, which is a small molecule designed to bind to PSMA. The PSMA-targeting ligand in the drug chemically attaches to a therapeutic radioactive element called Lutetium-177 (177Lu), which releases an energetic beta particle to precisely deliver cell-killing radiation to the disease site. Unlike traditional external beam radiotherapy, Pluvicto™ is administered as a systemic injection so it can directly target multiple sites of PSMA-positive prostate cancer throughout the body, including bone and soft tissue, while bypassing the PSMA-negative healthy cells.

Are there risks?

PSMA PET imaging has minimal risk. Treatment with Pluvicto™ may result in dry mouth, myelosuppression and renal toxicity.

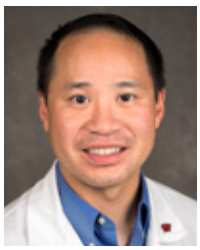
Providers

Steve Cho, MD
Radiologist

John Floberg, MD, PhD
Radiation Oncologist

David Jarrard, MD
Urologist

Joshua Lang, MD
Medical Oncologist



Glenn Liu, MD
Medical Oncologist

Shane Wells, MD
Radiologist

Location

UW Carbone Cancer Center
600 Highland Ave.
Madison, WI 53705

How to refer a patient:

Please call the UW Carbone Cancer Center's *Cancer Connect* line at **(800) 622-8922**—staffed by UW Health oncology nurses who can assist with patient referrals.

Carbone Cancer Center
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